## State of Missouri Department of Natural Resources Air Pollution Control Program

# GRAIN ELEVATOR AND GRAIN PROCESSING GENERAL AIR QUALITY OPERATING PERMIT/APPLICATION -- BASIC AND INTERMEDIATE STATE --

## **INSTRUCTIONS**

for

Option A - Basic State and Option B - Intermediate State
Based on Standardized Limits

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#### WHAT INSTALLATIONS QUALIFY TO COMPLETE THIS APPLICATION?

**QUALIFIED APPLICANTS.** Grain elevator or grain processing installations eligible to obtain an operating permit under Missouri State Rule 10 CSR 10-6.065, Sections (4), Basic State Operating Permits, and (5), Intermediate State Operating Permits, may complete and return the Permit/Application. Installations desiring to obtain an Intermediate General Operating Permit must be willing to accept production/process limits or requirements as conditions of their operating permit in order to restrict potential  $PM_{10}$  (particulate matter less than or equal to 10 microns in aerodynamic diameter) emissions to less than 100 tons per year (tpy). Basic State Installations have potential emissions such that no permit conditions or additional permit conditions are required to restrict potential  $PM_{10}$  emissions to less than 100 tpy.

All Permit/Applications must meet the following requirements:

- 1. Submit duplicate copies of the Permit/Application.
- 2. Submit \$100.00 application fee.
- 3. All signatures must be signed in ink.
- 4. When required, provide a completed Emission Inventory Questionnaire (EIQ).

Permit/Applications are incomplete unless all information requested is supplied. Failure to supply any additional information requested by the permitting authority may result in the denial of the Permit/Application.

If you need assistance or have further questions, Contact:

Missouri Dept. of Natural Resources
 Air Pollution Control Program
 Operating Permit Unit

P.O. Box 176

Jefferson City, MO 65102-0176 Telephone: (573) 751-4817

Fax: (573) 751-2706

Missouri Dept. Of Natural Resources Regional Offices

 Technical Assistance Program (TAP) (800) 361-4827

• The appropriate local agency:

Kansas City

Kansas City Health Dept. Air Quality Section 2400 Troost, 3<sup>rd</sup> Floor

Suite 3000

Kansas City, MO 64108 Telephone: (816) 983-4301

Fax: (816) 983-4475

Springfield-Green County

Air Pollution Control Authority 227 East Chestnut Expressway

Springfield, MO 65802 Telephone: (417) 864-1662

Fax: (417) 864-1499

St. Louis County

St. Louis County Dept. Of Health Air, Land & Water Branch Air Pollution Control Section

111 South Meramec Clayton, MO 63105

Telephone: (314) 854-6923

Fax: (314)854-6951

City of St. Louis

Div. Of Air Pollution Control 1220 Carr Lane Ave. St. Louis, MO 63104 Telephone: (314) 664-7877

Fax: (314) 865-1916

**EXEMPT INSTALLATIONS.** If your installation consists solely of a grain elevator and either of the following apply, then your installation does not need to apply for an operating permit:

- 1. Commercial grain elevator which:
  - (a) has total storage capacity less than or equal to 190,000 bushels (bu), and
  - (b) is located at least one-half (½) mile from any recreational area, residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located, **or**
- 2. Noncommercial grain elevator which:
  - (a) has total storage capacity less than or equal to 750,000 bu.,
  - (b) has grain handling capacity less than or equal to 4000 bushels/hour (bu/hr), and
  - (c) is located at least five hundred (500) feet from any recreational area, residence or business not occupied or used solely by the owners.

3. Country Grain Elevators which, during the last five (5) years, received less than 1,238,657 bushels of grain on annual basis. A "country grain elevator" is an elevator which receives more than 50 percent of its grain from farmers in the immediate vicinity during the harvest. To qualify for this exemption, the applicant must notify the Department of Natural Resources and maintain records of annual receiving for the last five years for review by the Department of Natural Resources upon request.

**INTERMEDIATE STATE INSTALLATIONS NOT IN AGREEMENT WITH STANDARDIZED LIMITS.** If Option A discussed below in Section III does not apply, note the standardized limits in Section III, Option B below. If you do not desire to agree to these limits; **do not proceed any further**. Contact the Air Pollution Control Program's Operating Permit Unit at (573) 751-4817 to request the General Grain and Feed Permit package that includes Option C. Option C is for Intermediate State Installations that desire to establish their own unique set of limits and requirements to restrict potential emissions to less than 100 tpy. It entails much more effort than Option B.

#### **ACRONYMS AND ABBREVIATIONS**

BTU = British Thermal Units BTU/HR = British Thermal Units per hour BU = bushel(s)

BU/YR = bushels per year

CSR = Code of State Regulations

DNR = Department of Natural Resources

EIQ = Emissions Inventory Questionnaire

EPA = Environmental Protection Agency

ER = emission rate

LBS/HR = pounds per hour

LBS/MMBTU/HR = pounds per million British Thermal Units per hour

Gallons/YR = gallons per year

G/DSCM = grams per dry standard cubic meter

GR/DSCF = grains per dry standard cubic foot

MARC = maximum annual receiving capacity

MMBTU/HR = million British Thermal Units per hour

MMCF/YR = million cubic feet per year

MDNR = Missouri Department of Natural Resources

PM = particulate matter

PM<sub>10</sub> = particulate matter less than or equal to 10 microns in aerodynamic diameter

Tons/HR = tons per hour

Tons/YR = tons per year

TPY = tons per year

#### **APPLICATION DEADLINES**

#### **INTERMEDIATE STATE INSTALLATIONS:**

If your installation intends to be classified as an Intermediate State Installation, and actual  $PM_{10}$  emissions as obtained from your latest EIQ are less than 50 tpy, then your application must be filed no later than May 13, 1997.

If actual  $PM_{10}$  emissions are greater than or equal to 50 tpy, then your application must be filed no later than July 15, 1996.

#### **BASIC STATE INSTALLATIONS:**

If your installation intends to be classified as a Basic State Installation, then your application must be filed no later than May 13, 1998.

**Section I - GENERAL INFORMATION.** You will find most of this information on Form 1.0 of your most recently completed EIQ.

**D.** Subpart DD Applicability. Affected facilities are as follows: each truck unloading and loading station, barge and ship unloading and loading station, railcar loading and unloading station, grain dryer, and all grain handling operations.

Grain handling operations include the following: bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpers, cleaners, trippers, and headhouses and other such structures.

If Subpart DD applies to any of your facilities, be sure to check the "applicable" box and blanks in Section 6.02 1. b. of the General Permit (Section VII) for this rule and for the specific affected facilities at your installation.

**Section II - EMISSION INVENTORY.** If your installation has not previously submitted the annually required Emission Inventory Questionnaire Forms, you need to obtain these forms and submit them with this application. Otherwise, you do not need to submit these forms. Amendments or changes to a previously submitted EIQ must be submitted at the same time as the general operating permit application. The additional EIQ forms must clearly state that they are replacement or additional forms.

**Section III - Potential Emissions.** Only one of the following options will apply to your installation -- Option A for Basic State Installations or Option B for Intermediate State Installations that agree to standardized receiving or production limits. Attempt to apply Option A first. If Option A does not apply, proceed to Option B.

- NOTE: 1. There is also an **Option C** for Intermediate State Installations that desire to establish their own individual set of limits and requirements. If after noting the standardized annual limits in Option B below, you do not desire to agree to those limits; contact the Air Pollution Control Program's Operating Permit Unit at (573) 751-4817 to request the General Grain and Feed Permit/Application package that includes Option C.
  - 2. Definitions of Terminal and Country Elevators. If your grain elevator receives 50% or more of its grain from farmers in the immediate vicinity during the harvest season, then it is classified as a **country elevator**. Otherwise, it is classified as a **terminal elevator**. A terminal elevator is an elevator that receives grain primarily from other elevators.

#### Option A:

Basic State Installations -- Installations with Potential Emissions Less Than 100 TPY of  $PM_{10}$  by Reason of Maximum Annual Receiving Capacity, or Construction Permit Receiving or Production Limits. The installation types and respective annual receiving and production rates noted in the table below are designed to qualify your installation as a Basic State Installation without requiring the use of new or additional process or production limits or pollution control requirements.

Installation types and rates are as follows:

Installation Type	Annual Receiving and Production Rates
Country Elevator	9,719,827 bu/yr
Terminal Elevator	8,956,896 bu/yr
Grain Elevator \ Grind & Mix Feed	9,537,931 bu./yr.\ 20,000 tons/yr.
Feed Mill	500,000 tons/yr.

1. **Maximum Annual Receiving Capacity (MARC)** -- <u>for Country Elevators only</u> (see "Country Elevator" definition above). If your installation's MARC is less than or equal to the above rates for the above installations, then enter your installations MARC into the small table in Section III Option A1. of the application. MARC is defined as "the highest annual amount of grain received during the previous 5 years multiplied times an adjustment factor of 1.2."

You will calculate MARC in Section III Option A1. of the application. If your installation has present **installation-wide** permit receiving or production limits proceed to 2. below and Section III Option A2. in the Permit/Application, otherwise proceed to Section IV.

2. Construction Permit Receiving or Production Limits. If your installation has present installation-wide permit limits (as contained in State or local agency-Issued "Permits to Construct") less than or equal to the above rates for the above installations, then enter the desired information into the table in Section III Option A2. of the application. Also, check the "applicable" box in Section 8.02 of the General Permit (Sect. VII). Proceed to Section IV.

#### Option B:

Intermediate State Installations -- Potential Emissions Limited to Less Than 100 TPY by Standardized Receiving or Production Limits without Additional Control Devices. (However, control devices inherent in processing, such as a cyclone for a pellet cooler, are considered.) The installation types and respective limits noted in the following table are designed to qualify your installation as an Intermediate State Installation without requiring the use of particulate control devices. If your installation desires one of the following limits, check the respective limit in Section III Option B of the application and also, check the "Applicable" box in Section 8.01 of the General Permit (Sect. VII). In agreeing to this limit, make sure that it is substantially above your expected peak annual receiving or production levels. See the definitions at the beginning of this section for the difference between Terminal and Country Elevators. Again, as mentioned above, if your installation is not willing to agree to any of the following limits, contact the Operating Permit Unit at (573) 751-4817 and request the General Grain and Feed Permit package that includes Option C. Standardized annual limits are as follows:

Installation Type	Standardized Annual Receiving and Production Rates
Country Elevator	9,719,827 bu/yr
Terminal Elevator	8,956,896 bu/yr
Grain Elevator \ Grind & Mix Feed	9,537,931 bu./yr. \ 20,000 tons/yr.
Feed Mill	500,000 tons/yr.

In addition, if your installation has boilers capable of being fired with fuel oil with combined total heat inputs greater than 14,200,000 BTU's/Hr., it is subject to a 830,000 gallon/yr. fuel oil combustion limit. If this is applicable to your installation, check the appropriate box in both Section III Option B of the Application and Section 9.02 in the General Permit (Sect. VII). If your installation accepts one of the above limits, you are finished with this section of the form -- proceed to Sect. IV - Present Permit Conditions of the application.

**Section VI - APPLICANT'S CERTIFICATION STATEMENT.** A responsible official must sign the document certification. The responsible company official is required to certify to the truth, accuracy, and completeness of the document. The certification must state that :

"Based on information formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete" (emphasis added).

The definition of responsible company official means, for most facilities, that the certification statement must be made by the plant manager or a more senior corporate official. In fact, at some locations, the plant manager can only make the certification if delegation of authority to the plant manager is approved in advance by the permitting authority. Eligible parties to make the certification include:

- a corporate officer
- a person in charge of a principal business function (e.g., a general manager), or
- a plant manager, provided that the plant has at least 250 employees or \$25 million in sales or expenditures (in 1980 dollars) or authority has been delegated.

Knowingly falsifying any document, representation, or certification is a felony under the Clean Air Act; therefore, responsible company officials must take care in preparing the certification, and must ask the proper questions to ensure the accuracy and completeness of the document.

**Section VII - GENERAL PERMIT.** Go through the General Permit thoroughly and check the "Not Applicable" box in all subsections (6.01 through 9.04) that do not apply to your installation. If Section 8.01 or 8.02 applies, then you need to check Sections 8.03 and 8.04 as "applicable." Similarly, if Section 9.01 or 9.02 applies, then you need to check Sections 9.03 and 9.04 as "applicable."

Be sure to check "not applicable" for those rules that do not apply to your area. All Missouri State Rules for your area are applicable. However, most likely 10 CSR 10-6.070, New Source Performance Standards, Subpart DD is not applicable. It will only affect a few installations. You will have to determine whether it affects your installation.

Please note that in many cases the "Record keeping Requirement" for many applicable requirements is the maintenance of previous DNR inspection reports.